Amendment to the Claims

Claims 1-10 (Canceled)

11. (Previously Amended) A method for preparing circularized recombinant nucleic acids from a vector and an insert comprising the steps of:

producing circularized recombinant nucleic acid by ligating a DNA insert and a DNA vector in the presence of a DNA compaction agent; and

selecting said circularized recombinant nucleic acid.

12. (Previously Amended) The method according to Claim 11, wherein the size of said circularized recombinant nucleic acid is greater than 10 kb.

13. (Previously Amended) The method according to Claim 11, wherein said selection comprises the steps of:

transferring said circularized recombinant nucleic acid into a cellular medium suitable for cloning,

cloning said circularized recombinant nucleic acid, and

testing for presence of said insert in said circularized recombinant nucleic acid.

14. (Previously Amended) The method according to Claim 11, wherein said DNA compaction agent is one selected from the group consisting of a protein, a mixture of proteins, and protein derivatives exhibiting the properties of said DNA compaction agent.

15. (Previously Amended) The method according to Claim 11, wherein said DNA compaction agent is one selected from the group consisting of histone proteins, histone protein derivatives, viral envelope proteins, phage envelope proteins, bacterial chromoid proteins, non-histone chromosomal

proteins, HMGs, derivatives of said proteins, and mixtures of said proteins and protein derivatives.

16. (Previously Amended) The method according to Claim 11, wherein said ligation comprises the step of adding a ligase to a ligation medium comprising DNA in solution in ligation buffer.

17. (Previously Amended) The method according to Claim 16, wherein said DNA compaction agent is added to said ligation medium prior to the addition of said ligase.

18. (Previously Amended) The method according to Claim 16, wherein said DNA compaction agent is added to said ligation medium simultaneously with the addition of said ligase.

19. (Previously Amended) The method according to Claim 11, wherein said DNA compaction agent is present at a concentration (C) allowing flexibility of said DNA.

20. (Previously Amended) The method according to Claim 19, wherein said DNA compaction agent concentration (C) is defined by the following equation:

$(C) = 10^{-X}$ mg DNA compaction agent/ng total DNA/bp recombinant,

wherein X = 8-15.

21. (Previously Amended) The method according to Claim 19, wherein said DNA compaction agent concentration (C) is defined by the following equation:

$(C) = (10^{-X}$ mg DNA compaction agent/ng total DNA/bp recombinant) $\cdot$ Y

wherein X = 8-15 and

Y = 0.2 - 10.

22. (Previously Amended) The method according to Claim 16, wherein said ligation medium further comprises a stabilizing agent, wherein said stabilizing agent is capable of preventing denaturation, aggregation, and absorption of said DNA compaction agent.

23. (Previously Amended) The method according to Claim 15, wherein said histone proteins are selected from the group consisting of histone H1, H2A, H2B, H3, and H4.

24. (Canceled) A kit for preparing circularized recombinant nucleic acids from a vector and an insert comprising a ligation buffer, a ligase, and a DNA compaction agent.

25. (Canceled) The kit according to Claim 24, wherein said DNA compaction agent is one selected from the group consisting of histone proteins, viral envelope proteins, phage envelope proteins, bacterial chromoid proteins, non-histone chromosomal proteins, HMGs, derivatives of said proteins, and mixtures of said proteins and protein derivatives.

26. (Canceled) The kit according to Claim 25, wherein said histone proteins are selected from the group consisting of histone H1, H2A, H2B, H3, and H4.

27. (New) The method according to claim 11, wherein the size of said circularized recombinant nucleic acid is greater than 5kb.